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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/505,989 | 02/17/2000 | Yoshiyuki Suetsugu | 49677-059 | 7678 |
| 20277 | 7590 | 10/24/2003 | EXAMINER | |
| MCDERMOTT WILL & EMERY 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096 | | | ZARROLI, MICHAEL C | |
| | | ART UNIT | PAPER NUMBER | |
| | | 2839 | | |

DATE MAILED: 10/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/505,989 | SUETSUGU ET AL. |
| | Examiner | Art Unit |
| | Michael C. Zarroli | 2839 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11 September 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-12, 15 and 16 is/are rejected.
- 7) Claim(s) 13, 14 and 17 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 17 February 2000 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on 11 September 2003 is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input checked="" type="checkbox"/> Other: <i>definition</i> . |

Specification

1. Objections have been overcome.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show “the pitch length of the grooved spacer begin (sic) twice as large as the predetermined pitch length” as described in the specification on page 5 last paragraph. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The examiner understands from the applicant’s arguments that the “predetermined pitch length” is the distance between S1 and S2. Where is the pitch length of the grooved spacer (111 in fig. 7); the examiner has not been able to extrapolate this?

3. All other drawing objections have been overcome.

Claim Objections

4. All claim objections have been overcome.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claims 3, 5-9 and, 15-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites that the spacer is “linear lengthwise.” Yet, the claim from which it depends recites that the spacer “is twisted...spirally.” How can both situations be the case? The examiner will interpret claim 3 to mean that the spacer is twisted spirally.

The examiner has attached a dictionary definition of linear; where in defines linear as a straight line. How can claim 2 recite a spacer that is “twisted around said central member **spirally**” and then in its dependent claim 3 recite that the spacer is “**linear** lengthwise?”

7. All other 112 rejections have been overcome.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country, in public use, or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 4 and, 10-11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wagman et al.

Wagman discloses an optical cable (10) with spirally provided grooves (27).

These grooves are substantially square in cross section (fig. 4) and, they hold a fiber ribbon stack (13). Wagman disclose that the inner width and height of the groove sidewalls are set greater than a width of the fiber ribbon (fig. 2).

Finally, Wagman discloses that the optical fiber ribbon is twisted lengthwise in one direction (figures 1 or 4).

Regarding claims 4 and 10 Wagman discloses that a central member (12) is a grooved spacer with at least one groove on its surface and each groove being spiral lengthwise (fig. 1). This groove is a spiral groove, spirally formed in one direction on the surface of the grooved spacer (fig. 1).

Regarding claim 11 Wagman discloses that a twisting pitch length of the fiber ribbon is equal to a spiral pitch length of the groove (fig. 1).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2 and, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagman et al as applied to claim 1 above, and further in view of Eoll.

Wagman does not disclose a central member and spacers with SZ-shaped grooves twisted around this central member so as to reverse their direction at a predetermined length.

Eoll discloses a central member (48) and spacers with SZ-shaped (col. 7 line 52) grooves (41) twisted around this central member (fig. 4).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Wagman to have the grooves wind around the central member as taught by Eoll. The motivation/suggestion for doing so would have been provide less stress on the fiber ribbons.

Response to Arguments

12. Applicant's arguments filed 9/11/03 have been fully considered but they are not persuasive.

Examiner does not agree that Wagman teaches away from the claimed invention. In the passages identified by the applicant, Wagman teaches a **shorter pitch or less susceptibility to stack rotation**, not reducing the rotation of a fiber ribbon in a slot. Even if Wagman did disclose reducing the rotation of the fiber, the examiner does not see where that impacts the language of the claims. The same goes for the applicant's argument about the Eoll reference, the fact that Eoll may or may not teach that the innermost major surface of a ribbon is adjacent a slot floor has nothing to do with the claim language for which this reference was applied.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Allowable Subject Matter

13. Claims 13-14 and, 17 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. Allowable subject matter was indicated in the previous office action.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sawano et al teaches a slight twisting of a fiber bundle.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Zarroli whose telephone number is 703-305-0608. The examiner can normally be reached on 7:30 to 3:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Feild can be reached on (703) 308-2710. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Michael C. Zarroli
Primary Examiner
Art Unit 2839

MCZ
MCZ

lin·e·ar

lin·e·ar (līn'ē-ər) *adjective*

Abbr. **lin.**

1. Of, relating to, or resembling a line; straight.
2. a. In, of, describing, described by, or related to a straight line. b. Having only one dimension.
3. Characterized by, composed of, or emphasizing drawn lines rather than painterly effects.
4. *Botany.* Narrow and elongated with nearly parallel margins: a *linear leaf*.

[Latin *līneāris*, from *līnea*, line. See *line*¹.]

— **lin·e·ar·ly** *adverb*

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